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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,122	07/25/2001	Kevin Kwong-Tai Chung	AI-TECH-23	5758

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DANN DORFMAN HERRELL & SKILLMAN
SUITE 720
1601 MARKET STREET
PHILADELPHIA, PA 19103-2307

EXAMINER

TRAN, KHOA H

ART UNIT	PAPER NUMBER
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3634

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/915,122

Applicant(s)

CHUNG, KEVIN KWONG-TAI

Examiner

Khoa Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 & 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to claim 1, line 10, the recitation of "or" renders the claim indefinite because it is unclear which one to the two nonequivalent alternatives the applicant is positively set forth; line 11, it is unclear what constitutes "a different release profile". Claim 2 is improper *Markush-type* claim. Further, several various materials are not from an art-recognizing group, i.e., tape-and-reel. See also claims 11 and 21. Claims 4, 10, 13, 20, 23 are indefinite for the same reasons as aforementioned in claim 1 because of the recitation of "or". Claim 30, line 11, "the one or more" should be --at least one--. With respect to claim 33, there is no antecedent basis for "said first adhesive layer" and "said second adhesive layer".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marutsuka ('481) in view of Plamthottam et al. ('191). Marutsuka ('481) discloses a

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transparent base (1) that is transparent to electromagnetic radiation shield and resist to deformation less than 140 degree Celsius. The base comprises an adhesive a layer (2) disposes on top of the base. See Figure 1. Marutsuka ('481) is silent on the adhesive layer being a cross-linking adhesive and the peel strength test. However, Plamthottam et al ('191) teach adhesively cured cross-linking adhesives having a high adhesion and capable of withstanding high temperature without adhesion failure and the adhesive has a good peel strength test. See the entire document. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the adhesive layer Marutsuka ('481) with the provision of the adhesively cured cross-linkable adhesive as taught by Plamthottam et al. ('191) in order to have an adhesive layer that is capable to withstand expose to high temperature without adhesion failure. With respect to claims 6-8, it would have been an obvious matter of engineering design choice as determined through routine experimentation and optimization for one of ordinary skill in the art to routinely dimension the percentage of the adhesive strength lost to be 70% after the cross-linking process, i.e., exposed to heat or radiation, and to routinely dimension the resistance to deformation that is less than 300 degree Celsius as taught by Plamthottam et al ('191) for a particular application thus producing no new and unexpected results.

Claims 1-27 and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallman et al. ('377) in view of Plamthottam et al. ('181). Hallman et al disclose a carrier base (24) mounted to a carrier frame structure (12) having at least

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portion (26) thereof transparent to electromagnetic radiation and bonded to a first adhesive layer on top (16) of the base and a second adhesive layer (14) bonds on the bottom of the base, see Figure 3; alternatively, the first and second adhesive layers are bonded adjacent to each other such that the second adhesive layer is disposed on top of the first adhesive layer. See Figures 2 and 6. Hallman et al. ('377) is silent on the adhesive layer being a cross-linkable adhesive and the peel strength test. However, Plamthottam et al ('191) teach adhesively cured cross-linking adhesives having a high adhesion and capable of withstanding high temperature without adhesion failure and the adhesive has a good peel strength test. See the entire document. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the adhesive layers Hallman et al. ('377) with the provision of the adhesively cured cross-linkable adhesives as taught by Plamthottam et al. ('191) in order to have adhesive layers that are capable to withstand exposure to high temperature without adhesion failure. With respect to claims 6-8, 15-17, and 25-27, it would have been an obvious matter of engineering design choice as determined through routine experimentation and optimization for one of ordinary skill in the art to routinely dimension the percentage of the adhesive strength lost to be 70% after the cross-linking process, i.e., exposed to heat or radiation, and to routinely dimension the resistance to deformation that is less than 300 degree Celsius as taught by Plamthottam et al ('191) for a particular application thus producing no new and unexpected results.

Claims 28 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallman et al. ('377) in view of Plamthottam et al. ('191) as applied to claims 1-27

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and 29-33 above, and further in view of Kelly et al. ('809). Kelly et al. ('809) teach an interlayer liner (20) between first and second adhesive layers (15 and 26) on a substrate (10). See Figure 5. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide adhesive layers of Hallman et al. ('377) with the provision of an interlayer liner (20) as taught by Kelly et al. ('809) in order to provide structural rigidity on the carrier.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Salatinot et al., Katsura et al., Schofield, Plamthottam et al. ('811), Marutsuka ('174) and ('674), Komatsu et al., Tolles, Gotoh et al., Kelly et al., Amou et al., Miller et al., Skoultchi, Asai et al., Jackson, Everaerts et al., Kushibiki et al., Burns, ('877), ('642), ('075), ('450), Mori et al., Gorowitz et al., Eichelberger et al., Penneck et al., Arjavalinagam et al. ('236) and ('094), Warren G. Van Dorn, Lundsager, Birkholm, Begelfer et al., Tilmans et al., Braden et al., are cited to show devices having similar configurations of design.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khoa Tran whose telephone number is (703) 306-3437. The examiner can normally be reached on Monday through Thursday from 8:30 A.M. to 7:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola, can be reached on (703) 308-2686. The fax phone number for this Group is (703) 305-3597 or (703) 305-3598.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

If the applicant is submitted by facsimile transmission, applicant is hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P. 502.02). In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the
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(Date)

Type or printed name of person signing this certificate:

(Signature)

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Furthermore, please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Khoa Tran
September 24, 2002

A handwritten signature in black ink that reads "Daniel P. Stodola". The signature is fluid and cursive, with the first name "Daniel" being the most prominent part.

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600